

IN THE CLAIMS:

Please AMEND claims 22-42; and

Please ADD claim 43, as shown below.

1-21 (Cancelled)

22. (Currently Amended) ~~Power~~ A power control device for calibrating the power of a transmitter or receiver in a mobile communication network comprising an antenna array, the device being adapted to transmit or receive burst signals to the antenna array which burst signals include a fixed training sequence, the transmitter or receiver comprising a power amplifier, and the power control device comprising:

a calibration means-unit configured to calibrate for calibrating the transmission or receiving power of the a transmitter or receiver in a mobile communication network, the calibrating means-calibration unit including a summing means-summer connected to the an antenna array of the transmitted or receiver, wherein the summer is configured to sum for summing transmission or reception signals, and a common calibrating device for calibrating-configured to calibrate the summed signals; and

a power control loop for controlling-configured to control the output power of the power amplifier, the power control loop containing a detector means-for detecting configured to detect the output of the power amplifier, and a controller means-for

~~controlling~~ configured to control the detector ~~means~~ so as to detect the output of the power amplifier only during ~~the~~ a time of output of ~~the~~ a training sequence,

wherein the device is ~~adapted~~ configured to control the power based on the detected output power, and

wherein the device is configured to transmit or receive burst signals for the antenna array and the burst signals include the training sequence.

23. (Currently Amended) ~~Device~~ The device according to claim 22, wherein the controller means ~~is adapted~~ is configured to issue a control signal ~~which~~ that is applied to a control input of the detector ~~means~~, and the controller means ~~being adapted~~ is configured to generate the control signal with a timing so as to operate the detector ~~means~~ only when the power amplifier outputs the fixed training sequence.

24. (Currently Amended) ~~Device~~ The device according to claim 22, comprising a transmission branch and a reception branch, and a first switch ~~means for switching~~ configured to switch the connection of the ~~summing means~~ summer either to the transmission branch or to the reception branch.

25. (Currently Amended) ~~Device~~ The device according to claim 24, comprising a second switch ~~means for switching~~ configured to switch the connection of the transmission branch either to the ~~summing means~~ summer or first switch ~~means~~, or to a

reference coupler ~~for supplying~~ configured to supply a reference signal to the transmission branch.

26. (Currently Amended) ~~Device~~ The device according to claim 24, further comprising a further switch ~~means~~ provided in the transmission branch ~~for~~ configured to temporarily ~~blanking~~ blank the transmission branch.

27. (Currently Amended) ~~Device~~ The device according to claim 22, wherein the device is ~~adapted~~ configured to measure, for transmit calibration (~~Tx calibration~~), idle timeslots with only one column active.

28. (Currently Amended) ~~Device~~ The device according to claim 22, wherein, when, for receive calibration, a dummy burst is generated and modulated onto a carrier, the device is configured to receive the dummy burst ~~is received~~ in each branch of a transmitter, ~~and to measure~~ the amplitude and phase differences between each path are measured, and to used the result of such measurement as a new receive calibration offset.

29. (Currently Amended) ~~Device~~ The device according to claim 22, further comprising a chipset of a mobile terminal which is used for calibration in conjunction with the calibration unit.

30. (Currently Amended) ~~Device~~The device according to claim 22, further comprising a passive coupling network in the antenna array and a calibration board which that works at radio frequencies in conjunction with the calibration unit.

31. (Currently Amended) ~~Device~~The device according to claim 22, further comprising an open loop static power control for controlling~~configured to control~~ the output power of ~~a~~the power amplifier, wherein the open loop static power control comprises a controllable attenuator ~~means~~arranged upstream of the input side of the power amplifier, the controllable attenuator means being controlled~~configured to be controlled~~ by ~~a~~the ~~controller means of the device.~~

32. (Currently Amended) ~~Device~~The device according to claim 22, wherein the device is configured~~which is adapted to set the output power on the basis of~~based on information measured in a previous timeslot and to avoid making~~no~~ power corrections ~~are made during a measured timeslot.~~

33. (Currently Amended) ~~Device~~The device according to claim 22, wherein the device is comprised for application~~in a smart antenna structure comprising several antennas, including a power amplifier in each antenna path, a common attenuator, and a splitter arranged between the common attenuator and the antenna paths, each power amplifier including~~ an embodiment of a~~the~~ power control loop.

34. (Currently Amended) ~~Power~~ A power control method, comprising:

~~for~~ calibrating the power of a transmitter or receiver in a mobile communication network comprising an antenna array;

~~wherein transmitting burst signals are transmitted to, or received by, the antenna array, wherein which the burst signals include~~ comprise a fixed training sequence, and the transmitter or receiver comprising a power amplifier;

~~comprising a calibration step for calibrating the transmission or receiving power of the transmitter or receiver, wherein the calibrating step including a~~ comprises ~~summing step for summing transmission or reception signals of the antenna array, and a common calibrating step for commonly calibrating the summed signals;~~ and

controlling the output power of the power amplifier ~~being controlled by a power control loop, wherein controlling includes which includes a detector means for detecting the output of the power amplifier, and a control means for controlling the detector means in a controlled manner so as to detect the output of the power amplifier only during the time of output of the training sequence, and wherein controlling the power is controlled based on the detected output power.~~

35. (Currently Amended) ~~Method~~ The method according to claim 34, wherein the controlling comprises ~~means issues issuing a control signal which that is applied to a control input of the detector means~~ controls the detecting, the control means and

generating the control signal with a timing so as to ~~operate the detector means~~ detect only when the power amplifier outputs the fixed training sequence.

36. (Currently Amended) ~~Method~~The method according to claim 34, further comprising ~~a transmission branch and a reception branch, and a first switch means for a~~ first switching the a connection of a summing means summer for performing the summing step ~~either to the a transmission branch or to the a reception branch.~~

37. (Currently Amended) ~~Method~~The method according to claim 36, further comprising ~~a second switch means for a second~~ switching the connection of the transmission branch either to the ~~summing means summer~~ or ~~first switch means~~ to a first switch for performing the first switching, or to a reference coupler for supplying a reference signal to the transmission branch.

38. (Currently Amended) ~~Method~~The method according to claim 36, comprising ~~a blanking step for temporarily blanking the transmission branch.~~

39. (Currently Amended) ~~Method~~The method according to claim 34, further comprising measuring idle timeslots wherein, for transmit calibration (Tx calibration), ~~idle timeslots are measured with only one column active.~~

40. (Currently Amended) ~~Method~~The method according to claim 34, further comprising, wherein for receive calibration, generating a dummy burst, ~~is generated and modulated~~modulating the dummy burst onto a carrier, receiving the dummy burst is received in each branch of a transmitter, and measuring the amplitude and phase differences between each path, ~~are measured and used~~using the result of the measuring as a new receive calibration offset.

41. (Currently Amended) ~~Method~~The method according to claim 34, further comprising setting wherein the output power is ~~set on the basis of~~based on information measured in a previous timeslot, and abstaining from making ~~no~~ power corrections ~~are made~~ during a measured timeslot.

42. (Currently Amended) ~~Method~~The method according to claim 34, further comprising performing the method for application in a smart antenna structure comprising several antennas, including a power amplifier in each antenna path, a common attenuator, and a splitter arranged between the common attenuator and the antenna paths, each power amplifier including a power control loop.

43. (New) A power control device, comprising:
calibration means configured to calibrate the transmission or receiving power of a transmitter or receiver in a mobile communication network, the calibration means

including a summing means, connected to an antenna array of the transmitter or receiver, for summing transmission or reception signals, and a common calibrating means for calibrating the summed signals; and

power control loop means for controlling the output power of the power amplifier, the power control loop containing a detector means for detecting the output of the power amplifier, and a control means for controlling the detector means so as to detect the output of the power amplifier only during a time of output of a training sequence,

wherein the device is configured to control the power based on the detected output power, and

wherein the device is configured to transmit or receive burst signals for the antenna array and the burst signals include the training sequence.